

High Street/Route 1/Route 3 Corridor Study Ellsworth

November 18, 2004

Presented To:
Maine Department of
Transportation and The City of
Ellsworth

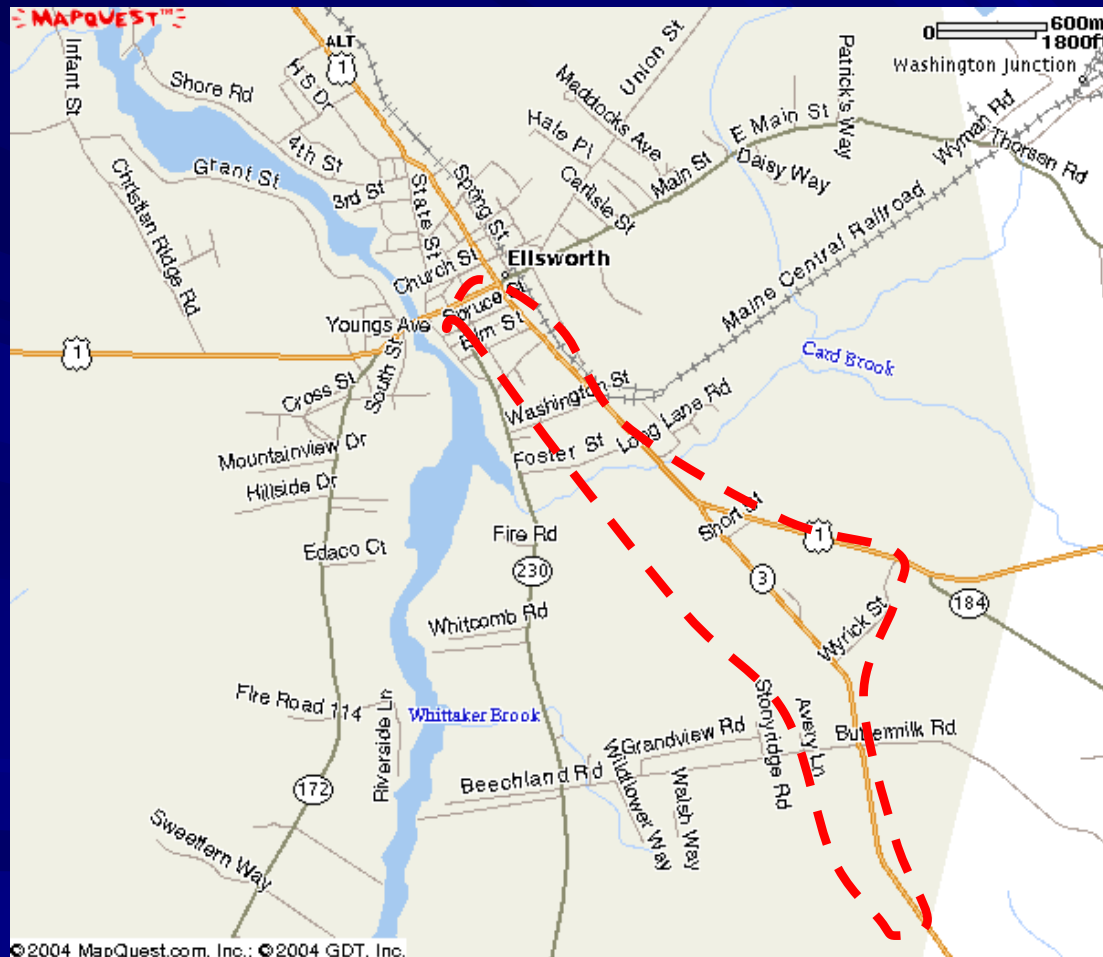
Presented By:
Gorrill-Palmer Consulting
Engineers, Inc.



Purpose of Project

- Determine improvements that can be made to the existing street system to improve traffic flow on High Street, Route 1 and Route 3 within the study area

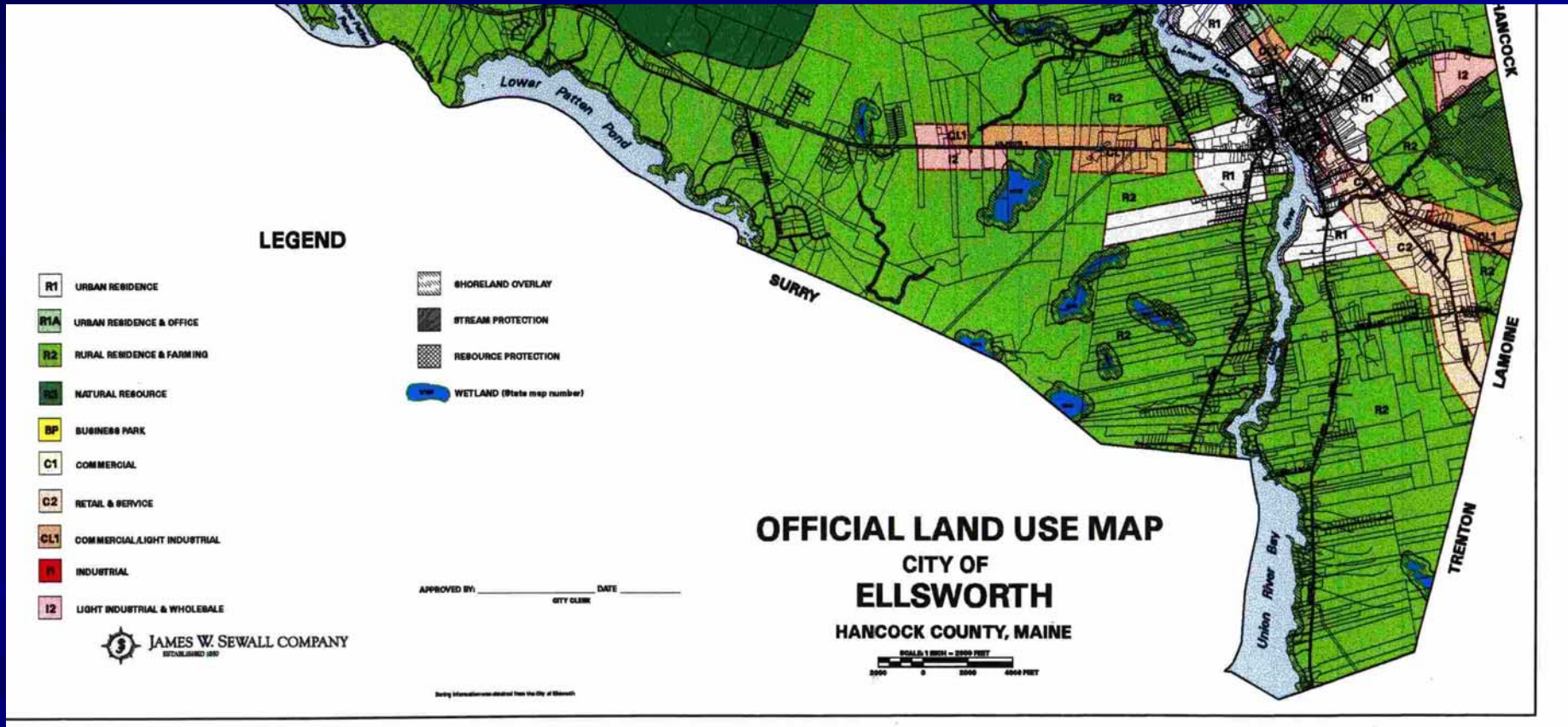
Study Area



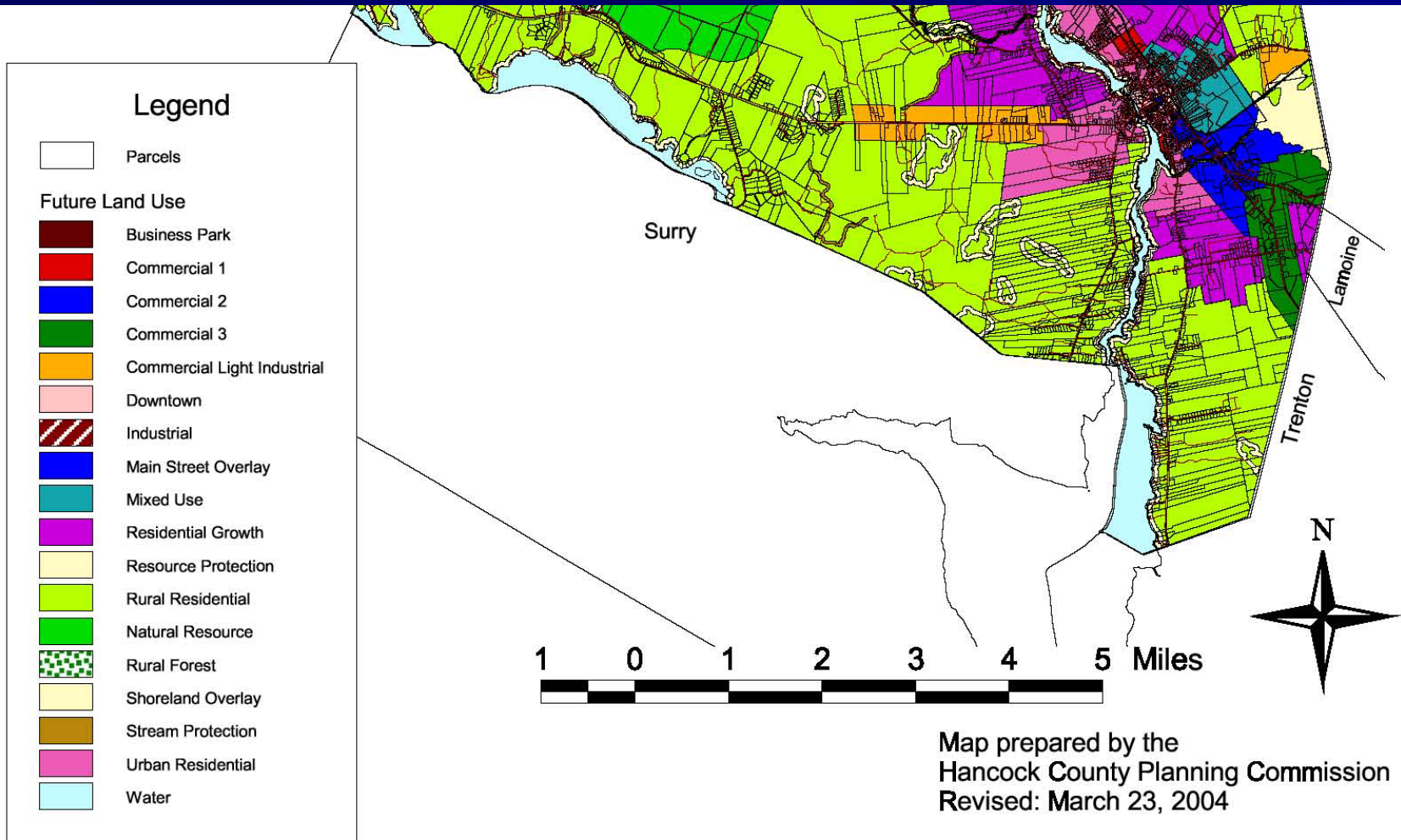
Land Use Forecast

- Based on Cities Comprehensive Plan and Zoning
- Based on expected growth in development
- Horizon Year – 2025

Land Use Map



Future Land Use



Land Use Forecast (Con't)

- Linnehan Parcel
 - 200,000 Square Feet of Retail
- Myrick Road
 - 460,000 Square Feet of Retail
- King Parcel
 - 210,000 Square Feet of Retail

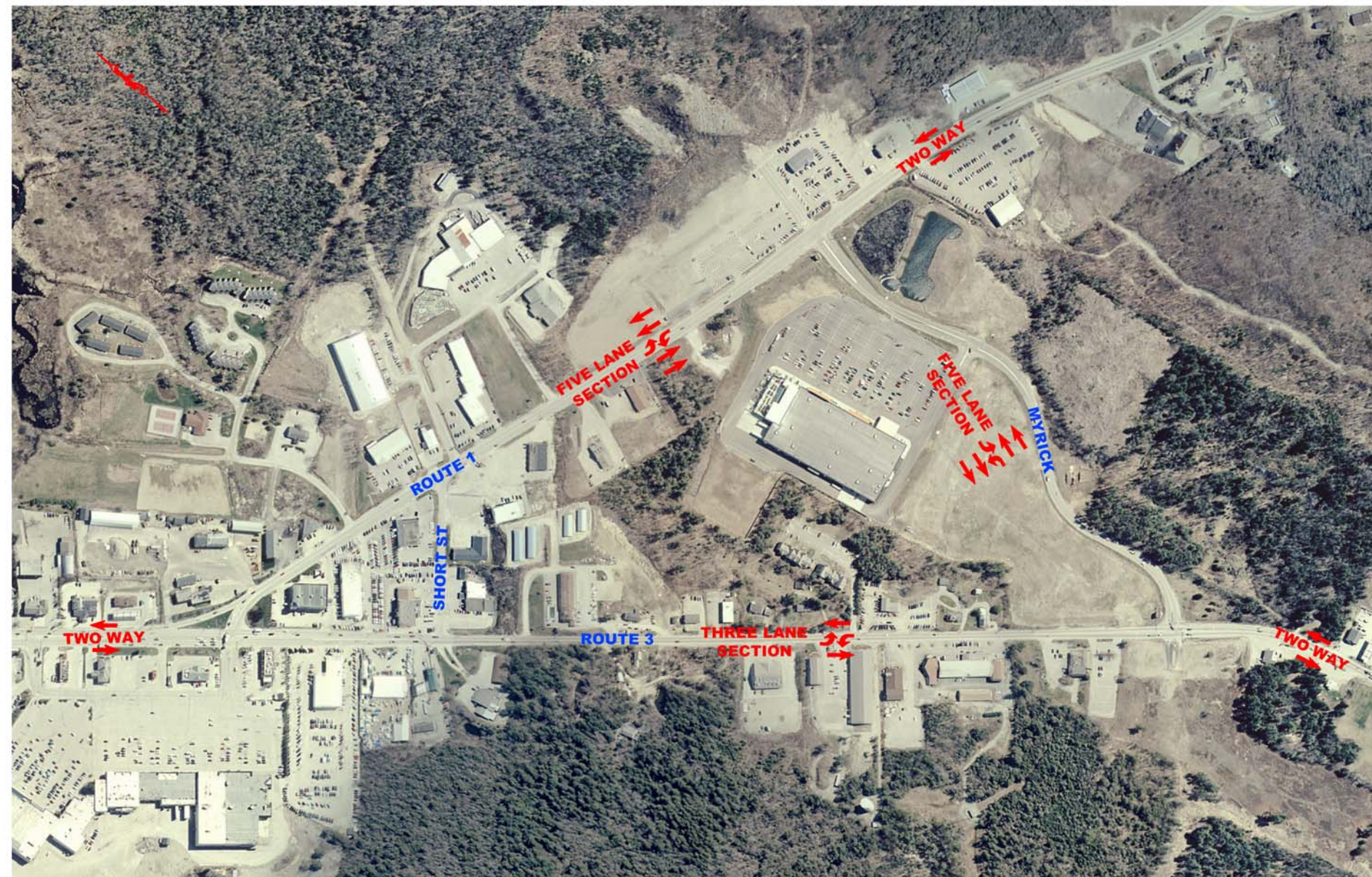
The “Triangle”



Background Traffic Growth

- Based on historic counts
- 1 % per year

Alternative 1



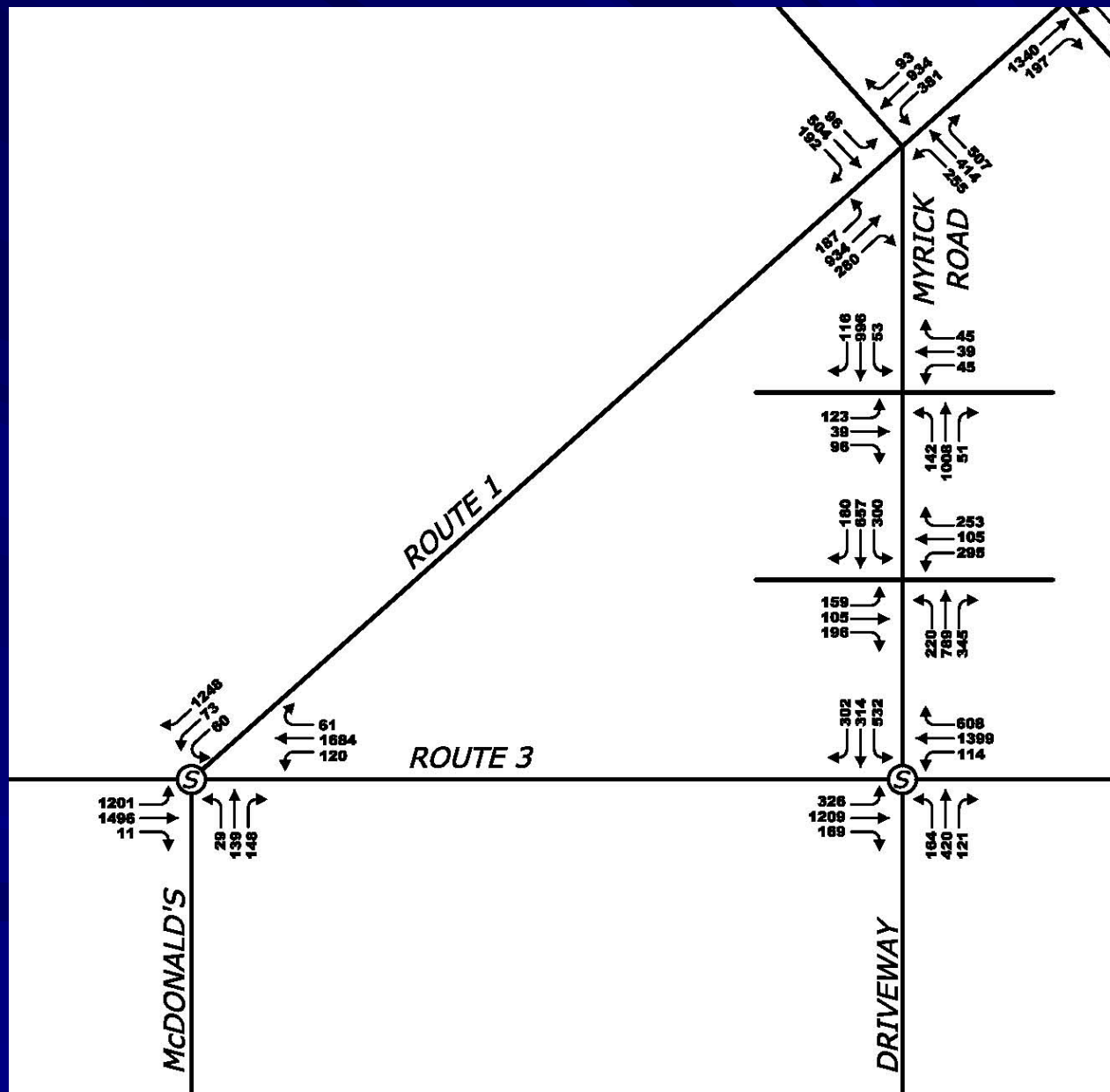
Pros

- Maintains Existing Traffic Patterns
- Provides left turn lanes for turning traffic, improving flow of through traffic

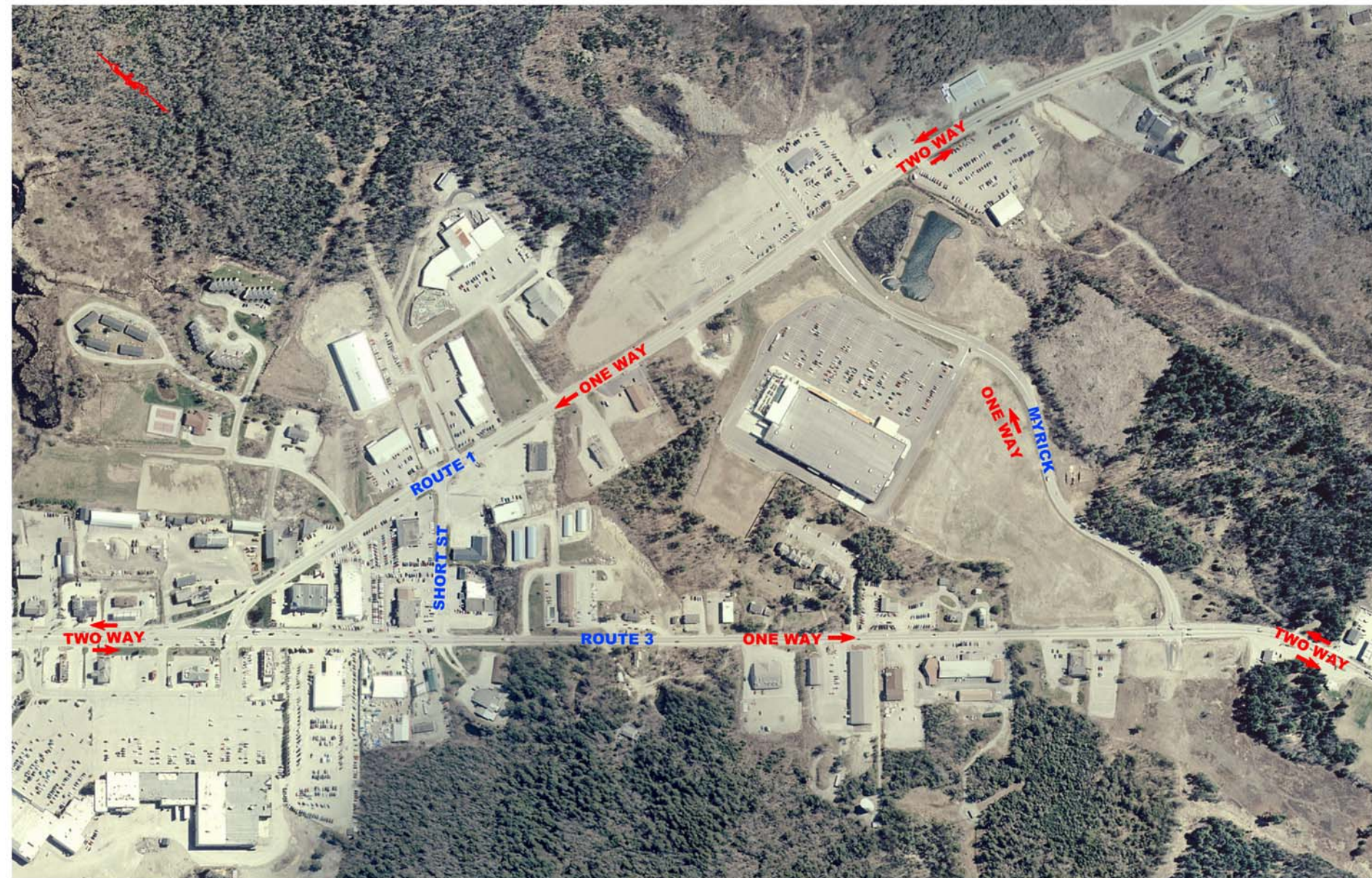
Cons

- Does not solve traffic congestion between the Triangle and Myrick Road
- Adjacent grades between triangle and Myrick and a 4F property limit the amount of widening that can occur

2025 Forecasted Volumes



Alternative 2



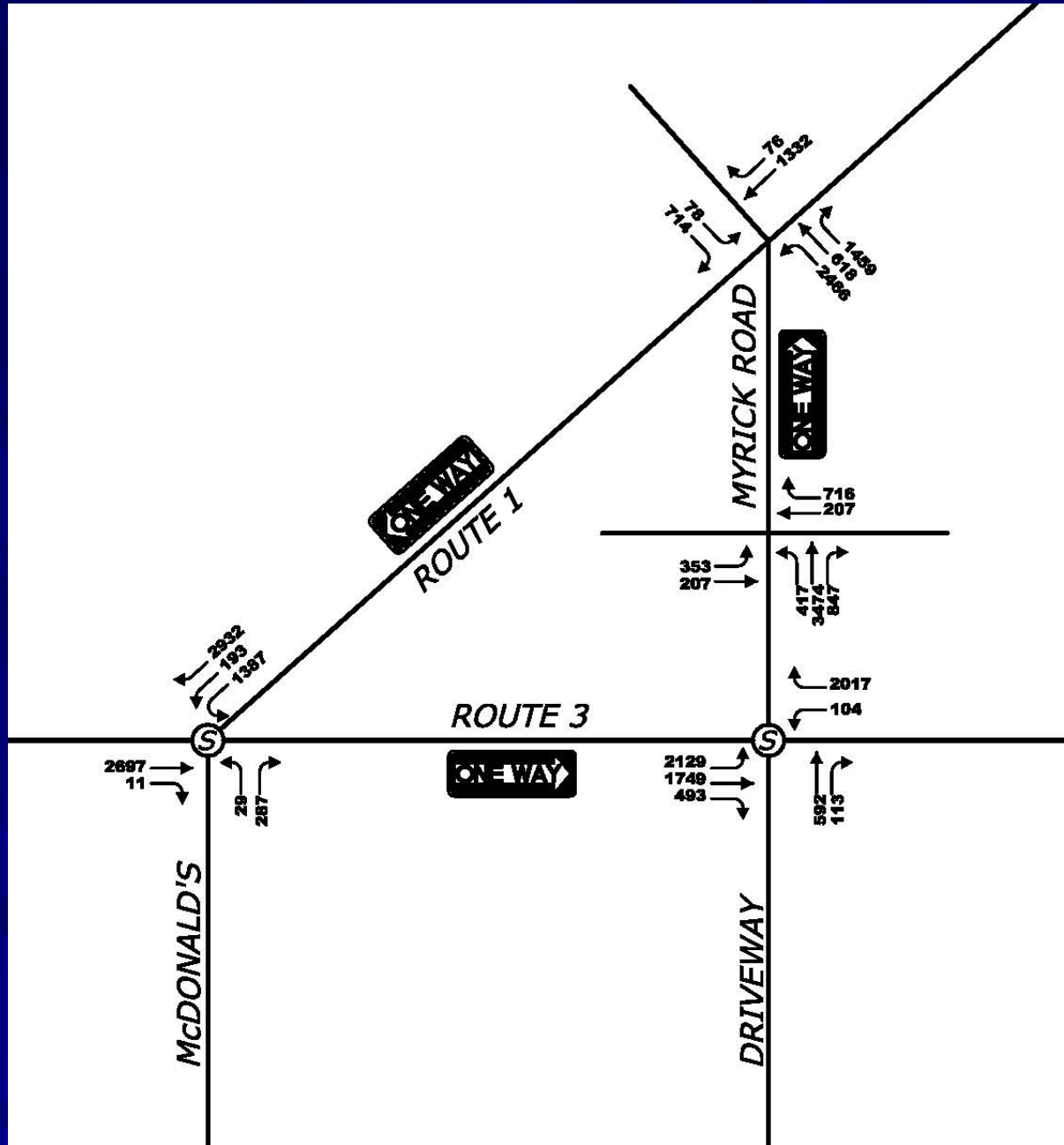
Pros

- Eliminates EB left turn onto Route 1 at Triangle
- One way flow will require less new pavement on Routes 1/3
- Reduces the number of conflicting movements

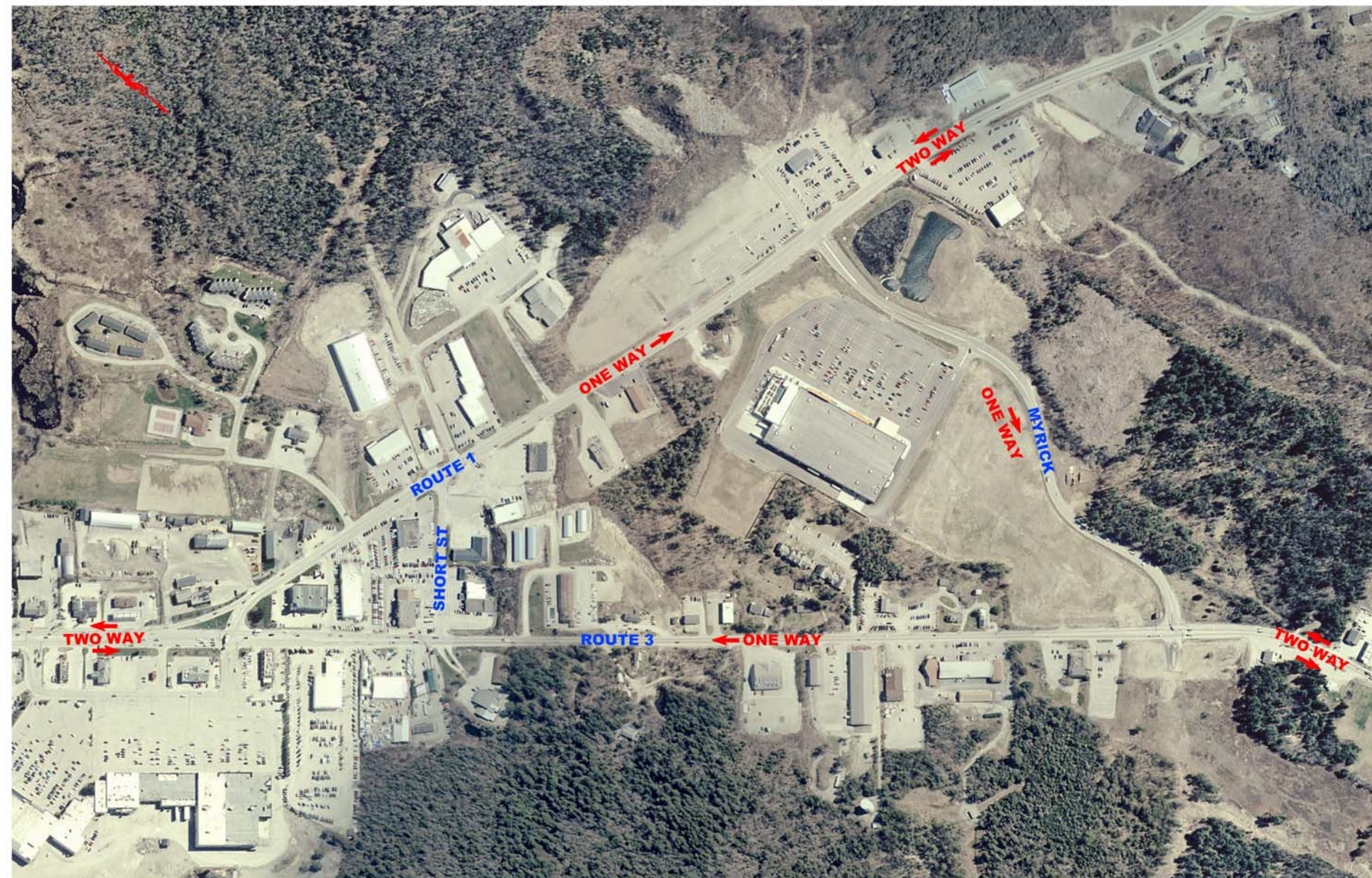
Cons

- Vehicles NB on Route destined EB on Route 3 will need to traverse the triangle and vice versa
- Impact to Businesses
- Creates large intersections at Route 1/Myrick and Route 3/Myrick

2025 Forecasted Volumes



Alternative 3



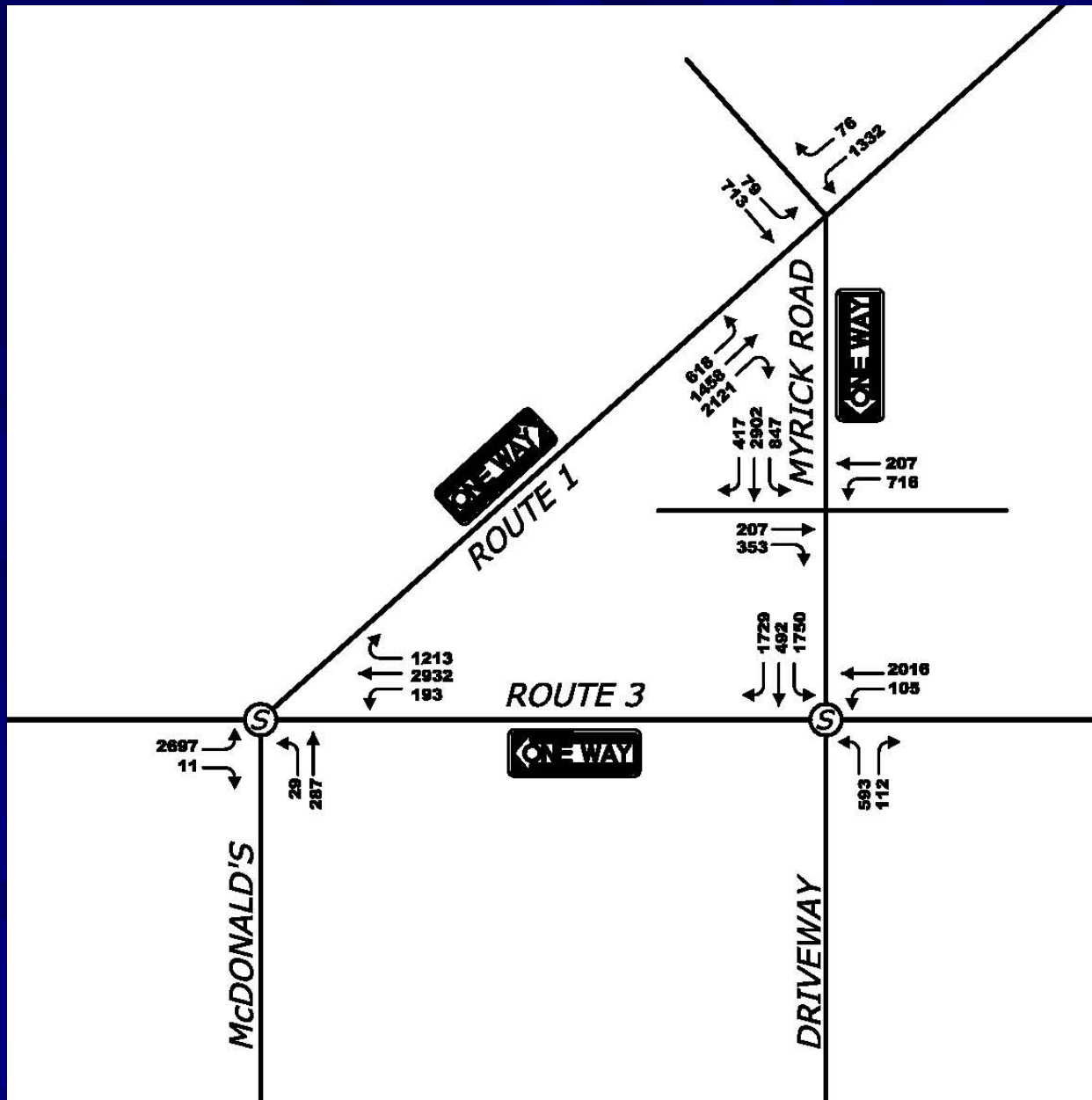
Pros

- One way flow will require less new pavement on Routes 1/3
- Reduces the number of conflicting movements

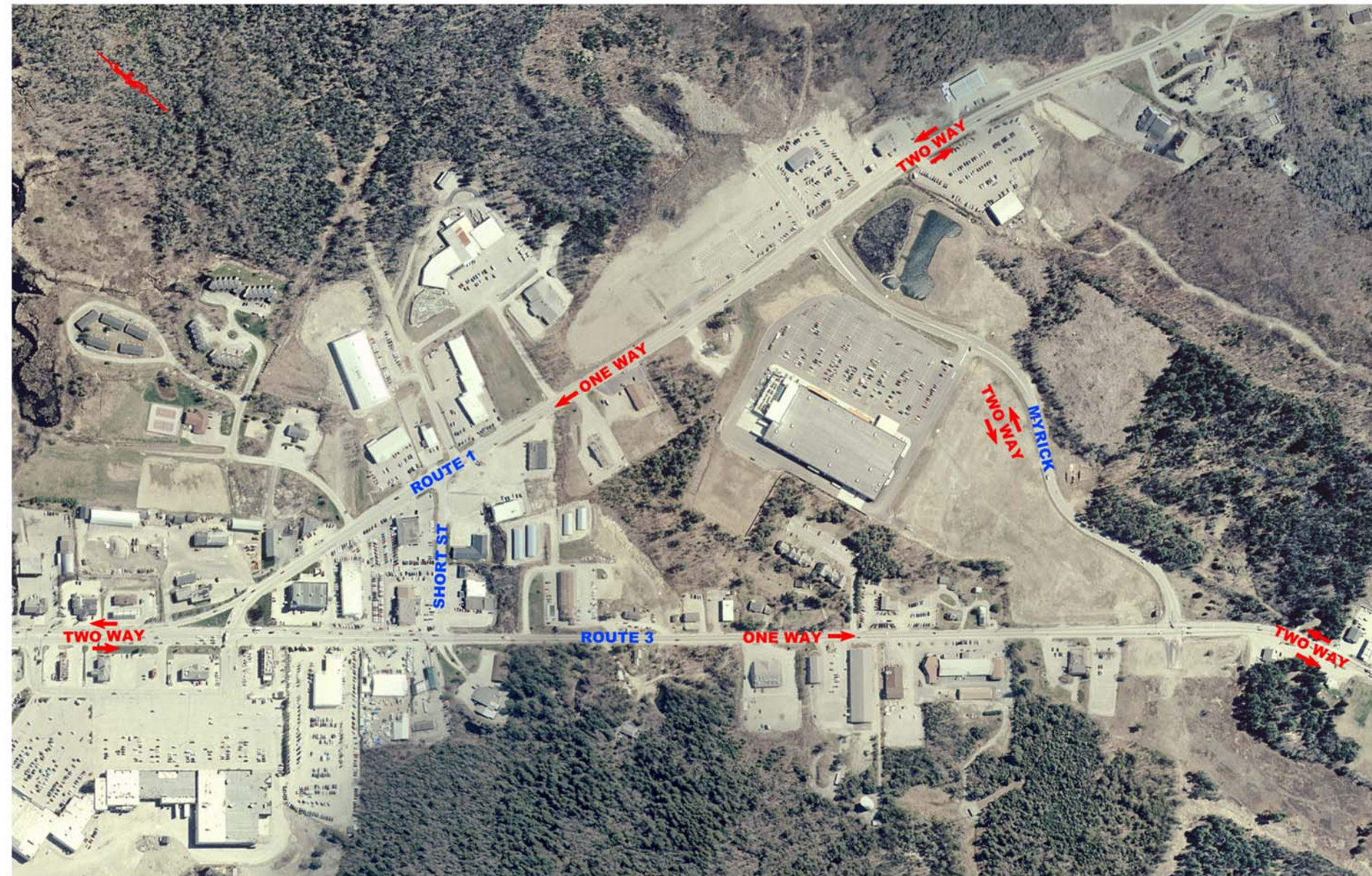
Cons

- Creates a large left turn movement against a large through movement at the triangle
- Inefficient traffic flow pattern compared to counter clockwise flow
- Impact to Businesses

2025 Forecasted Volumes



Alternative 4



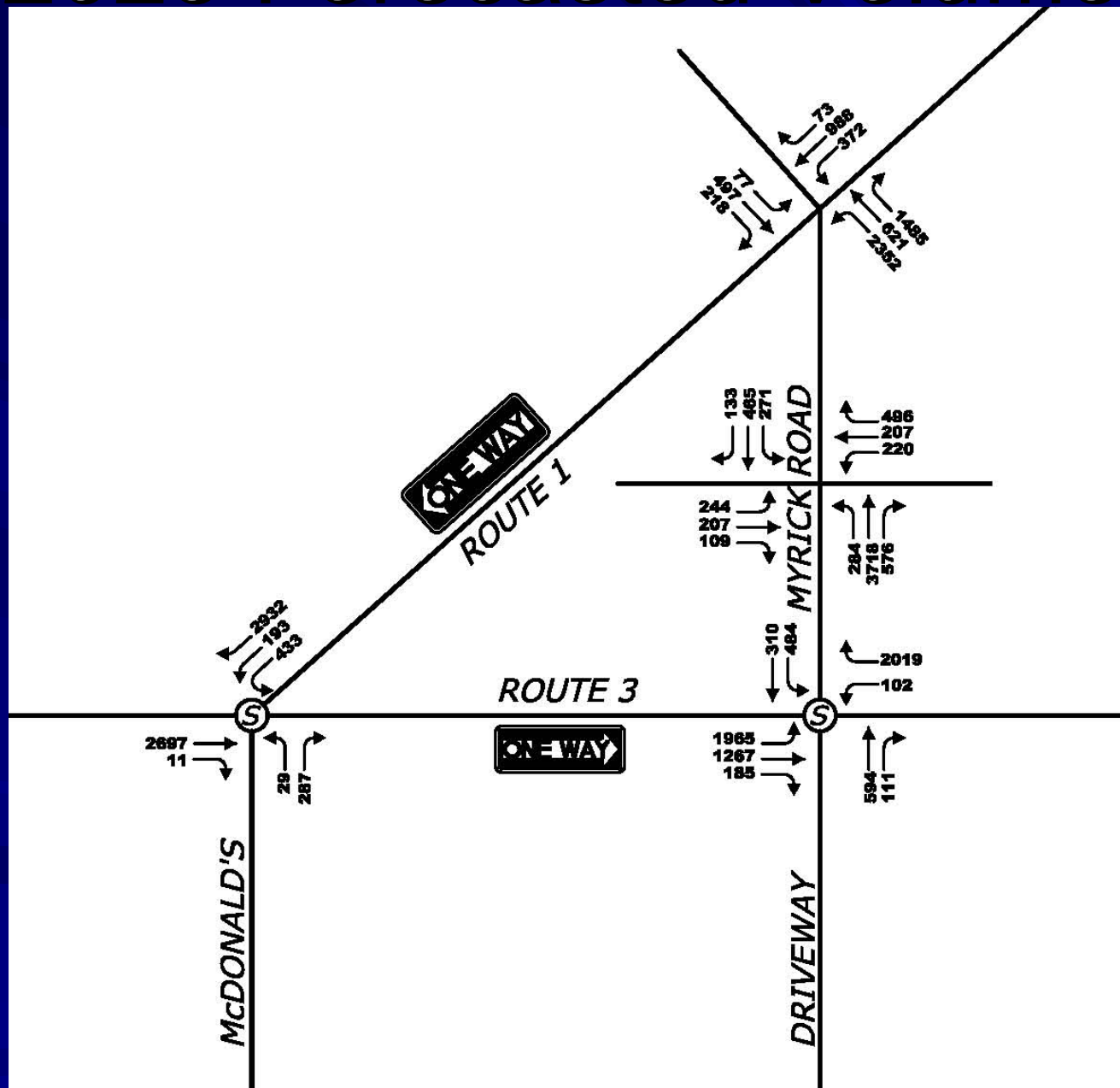
Pros

- Eliminates EB left turn onto Route 1 at Triangle
- Traffic between Routes 1 & 3 can use Myrick to cut across , staying out of the triangle
- One way traffic flow will require less new pavement on Route 1 and 3

Cons

- Creates large intersections at Route 1/Myrick and Route 3/Myrick
- Impact to Businesses

2025 Forecasted Volumes



Alternative 5



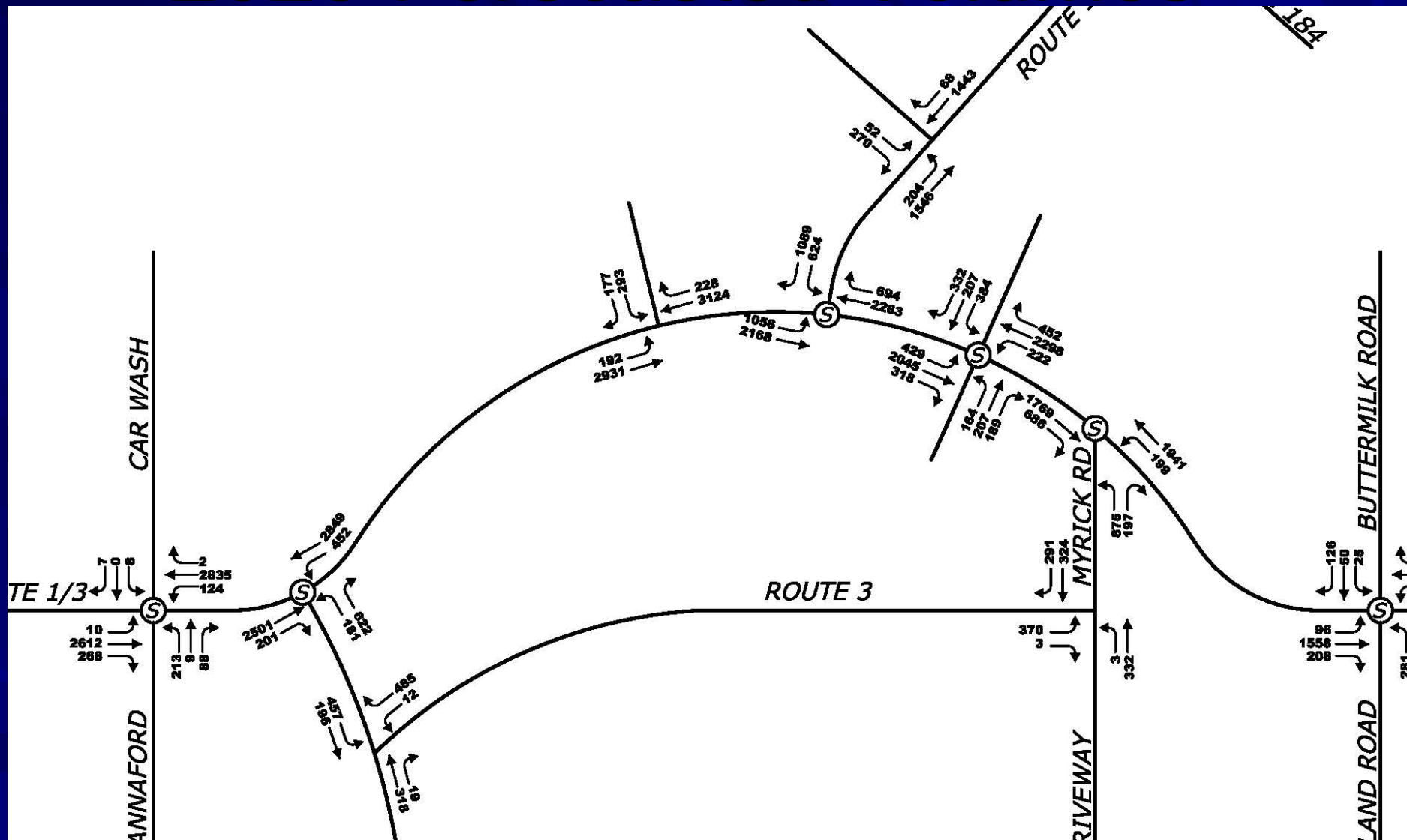
Pros

- Eliminates EB left turn onto Route 1 at Triangle
- ROW is easier to obtain
- Creates new alignment for Route 3 away from the 4F property

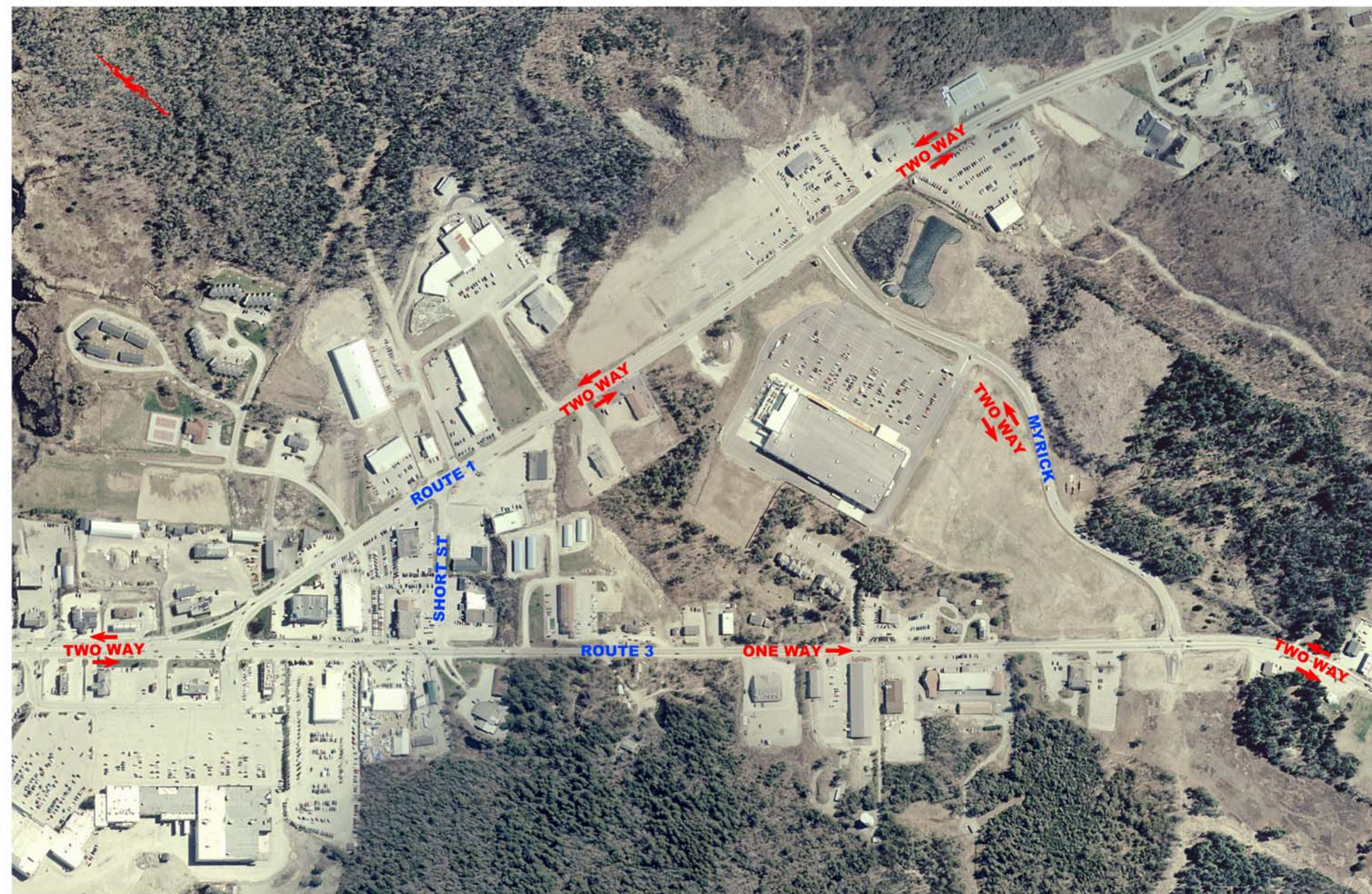
Cons

- Existing Route 3 Between Route 1 and Myrick Becomes Local Street
- Significant amount of new pavement

2025 Forecasted Volumes



Alternative 6



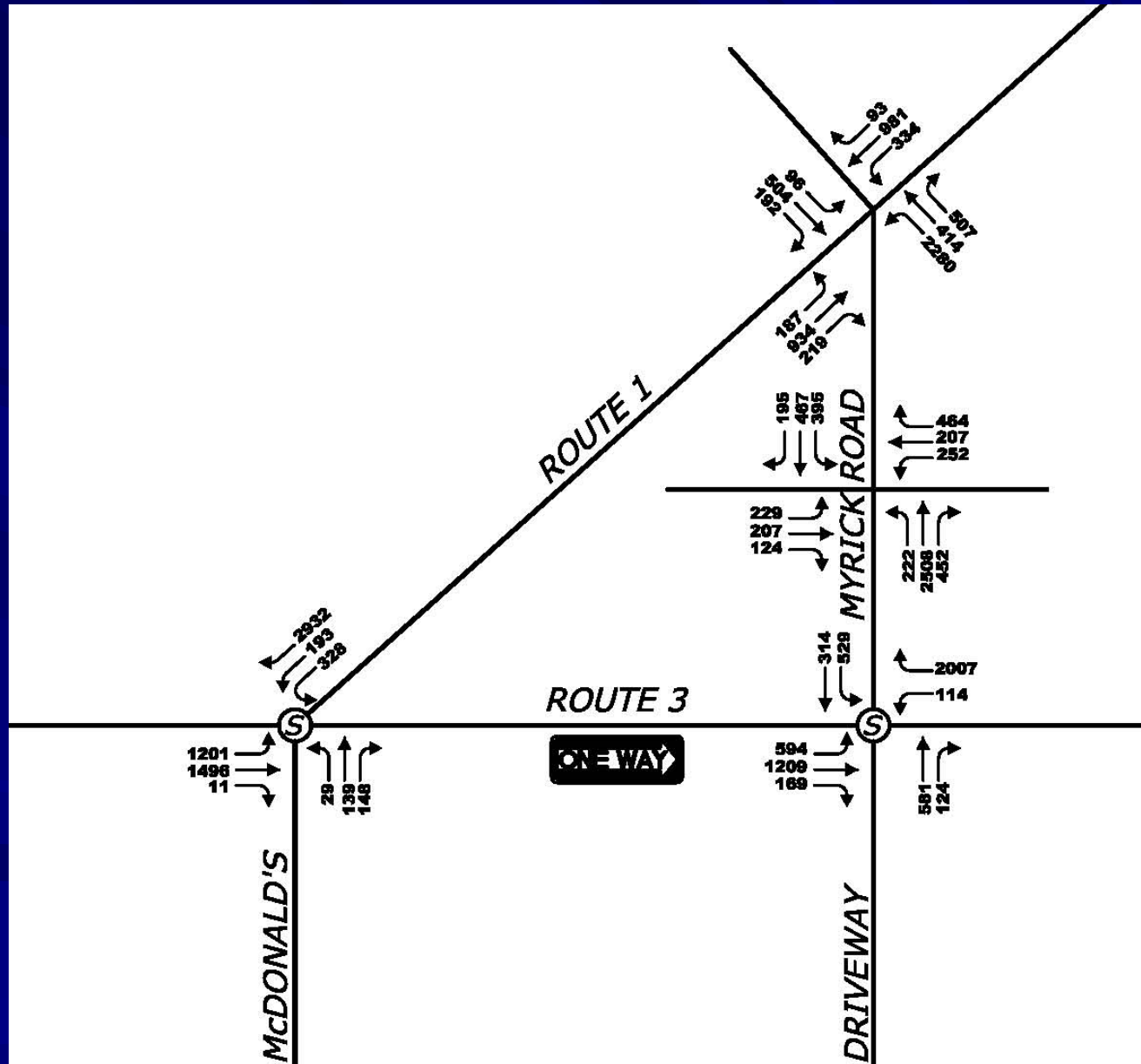
Pros

- Provides left turn lanes on Route 1 for turning traffic, improving flow of through traffic
- Route 3 widening kept to a minimum

Cons

- Impacts to business on Route 3
- Creates large intersections at Route 1/Myrick and Route 3/Myrick

2025 Forecasted Volumes



Alternative 7



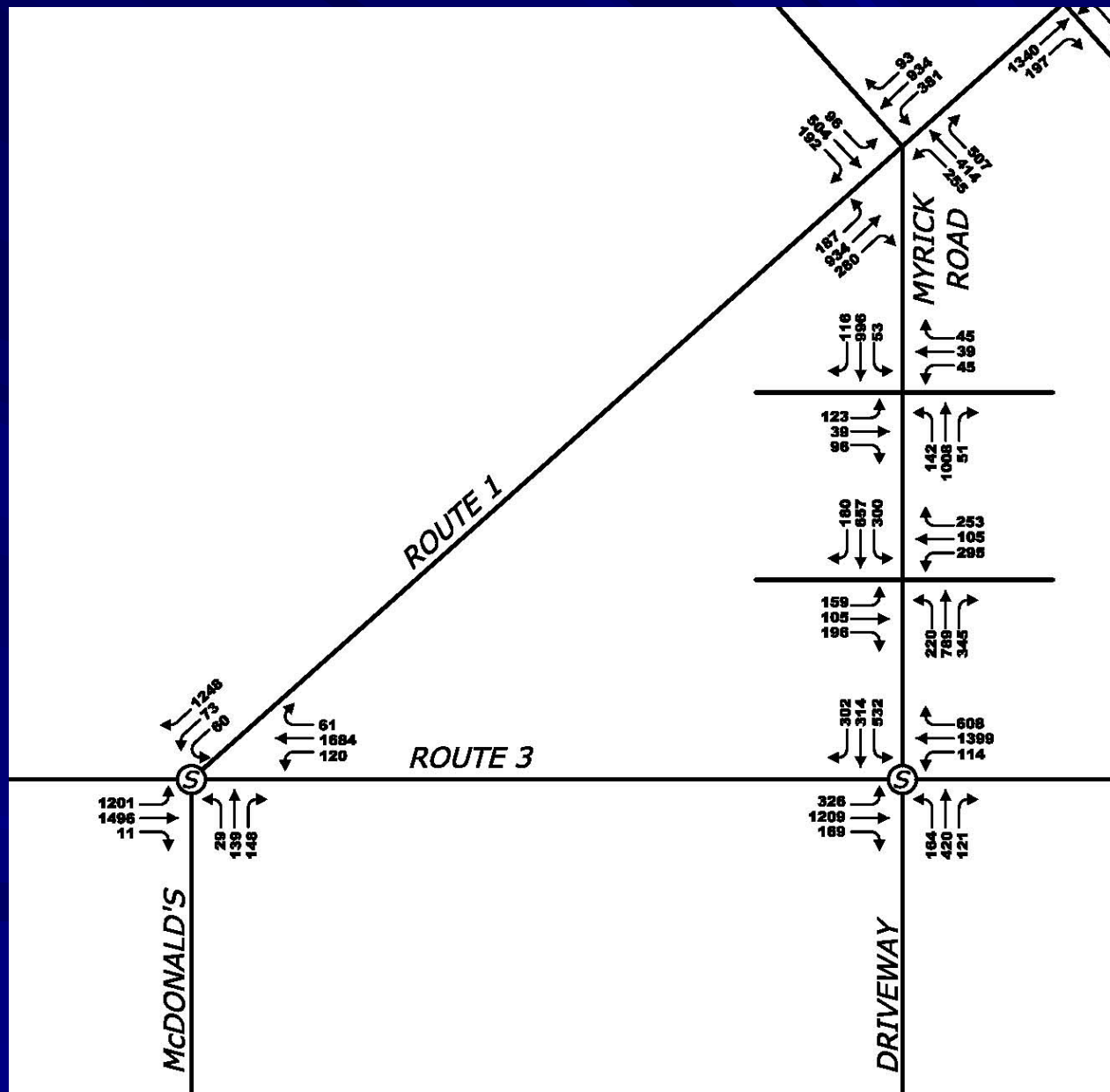
Pros

- Maintains Existing Traffic Patterns
- Provides left turn lanes on Route 1/3 for turning traffic, improving flow of through traffic

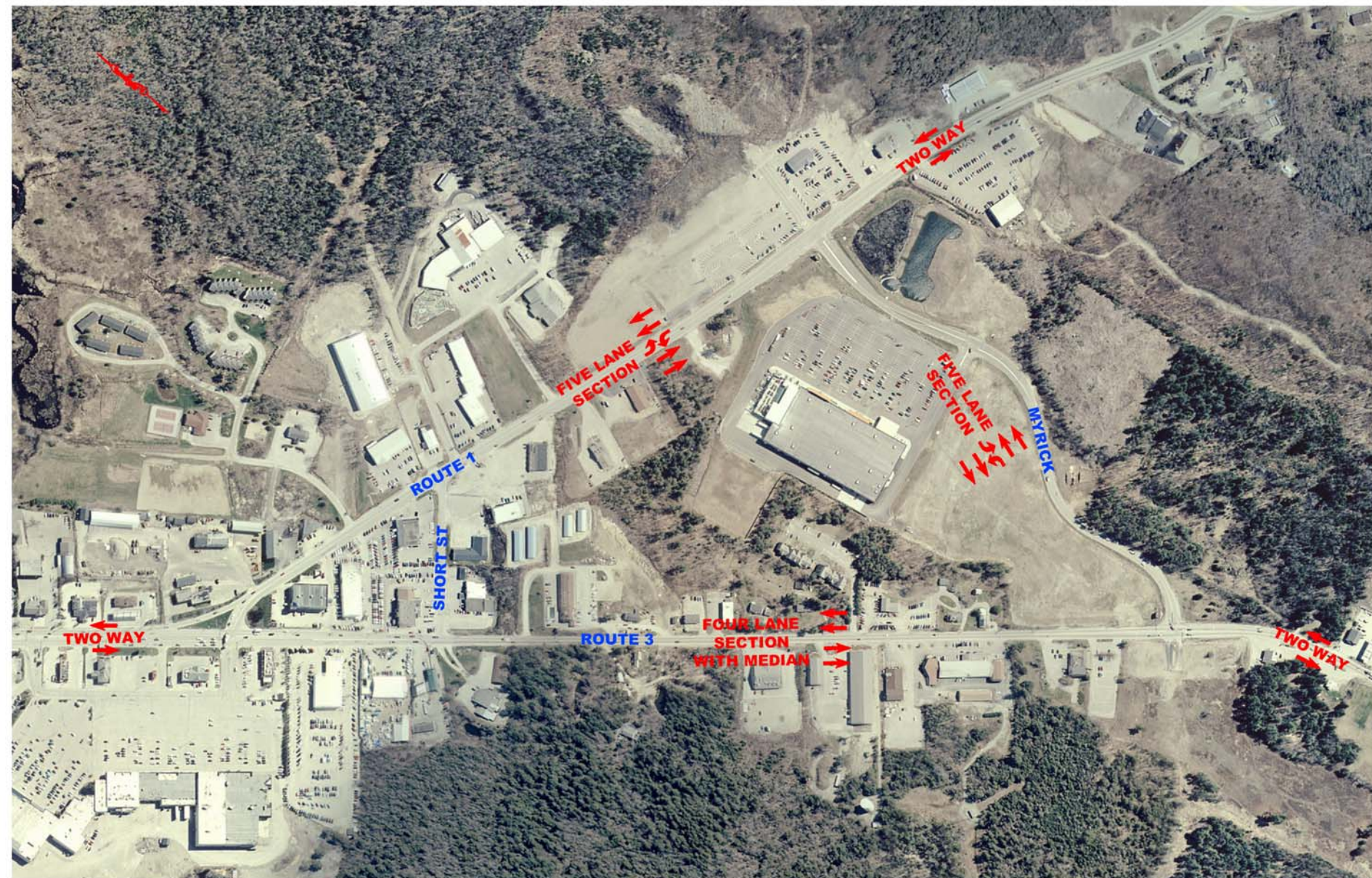
Cons

- Adjacent grades between triangle and Myrick and a 4F property limits the amount of widening that can occur
- May Require taking Hotel

2025 Forecasted Volumes



Alternative 8



Pros

- Maintains Existing Traffic Patterns
- Provides left turn lanes on Route 1 for turning traffic, improving flow of through traffic
- Provides Median on Route 3 to eliminate left turning traffic improving flow of through traffic

Cons

- Median on Route 3 limits access to business

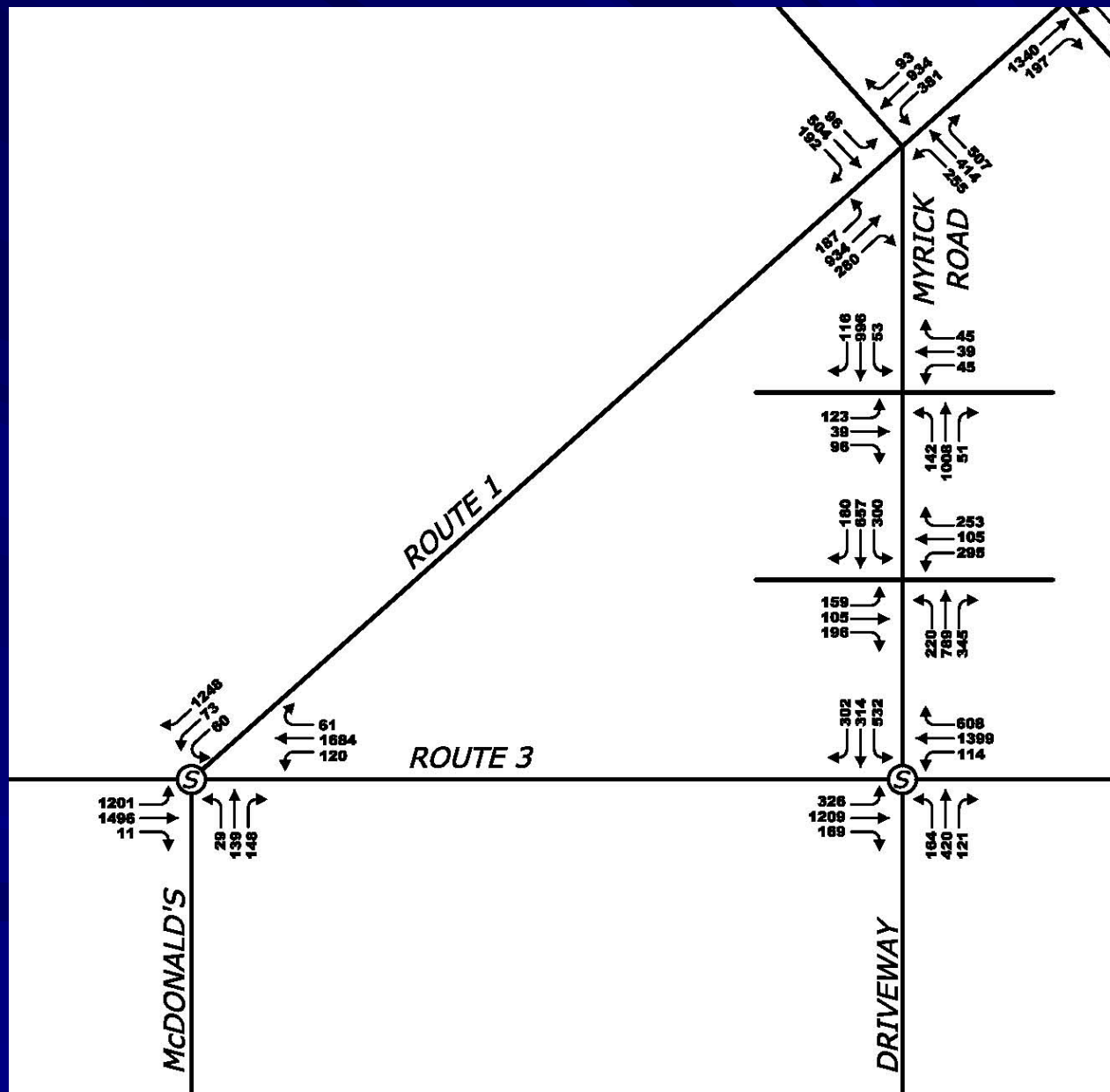
Opinion of Cost – Alt. 6

| Location | Cost |
|---------------------------|-------------------------|
| Route 1 | \$ 3,600,000.00 |
| Route 3 | \$ 5,152,000.00 |
| Buttermilk/Beechland | \$ 378,000.00 |
| Myrick Street | \$ 2,386,000.00 |
| PE (10%) | \$ 1,151,600.00 |
| CE (10%) | \$ 1,151,600.00 |
| | |
| Total Improvements | \$ 13,819,200.00 |

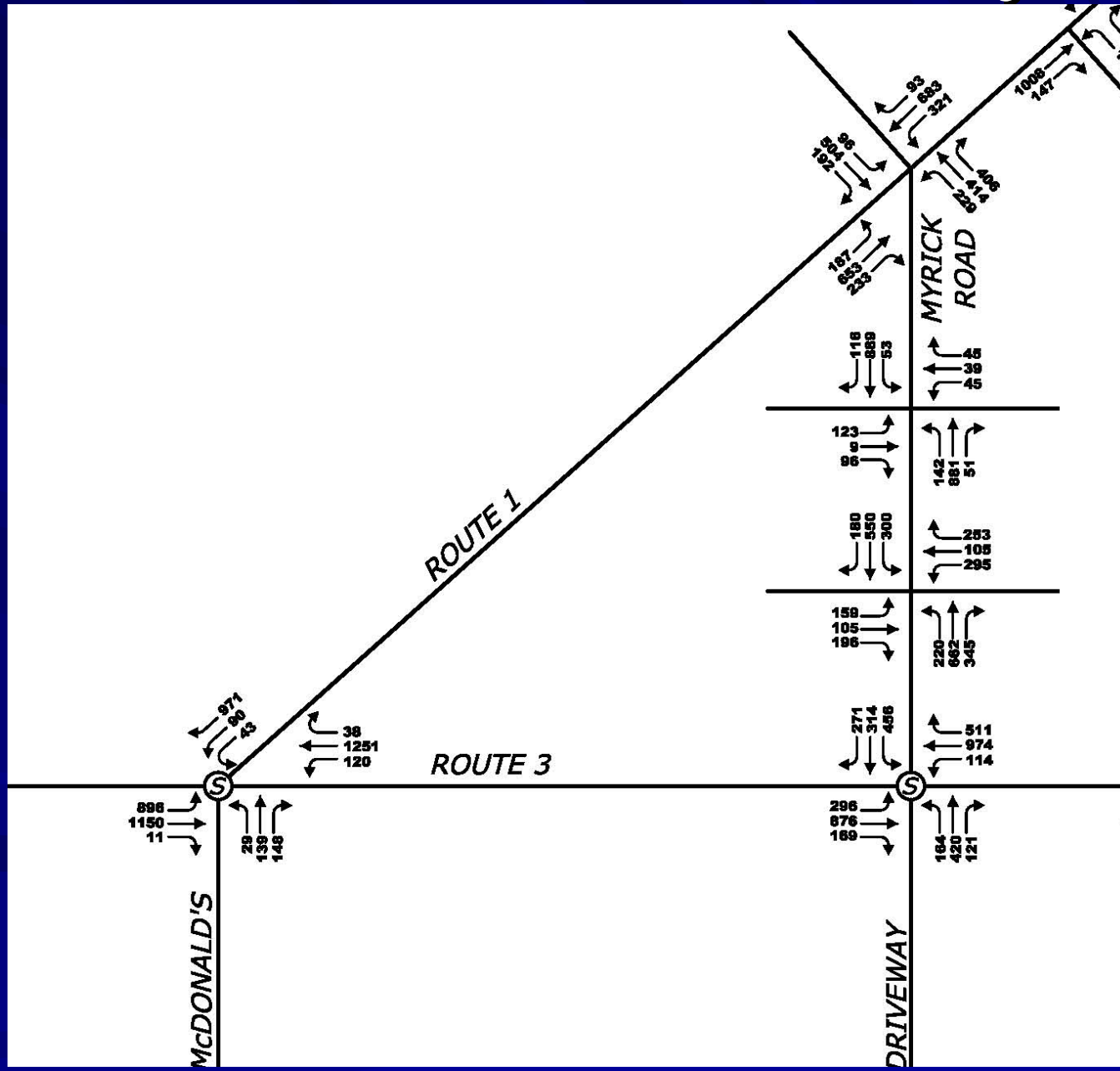
NOTES:

1. Opinion of cost does not include Legal Costs.
2. Opinion of cost does not include the remediation or removal of any special or hazardous materials such as Asbestos, PCB's, etc.
3. Opinion of cost does not include costs associated with right of way
4. Opinion of cost does not include costs associated with wetlands
5. Opinion of cost is based on MDOT 2004 unit prices
6. Opinion of cost does not include utility relocations

2025 Forecasted Volumes



Forecasted Volumes 1%/year



Recommended Alternative

- Alternative 6
- SimTraffic Model

The End